## NETWORK RELIABILITY & INTEROPERABILITY COUNCIL

For Immediate Release July 23, 1999

# U.S. TELECOMMUNICATIONS INDUSTRY NEARS YEAR 2000 READINESS

The U.S. telecommunications industry is fast closing on its goal to be Year 2000 ready allowing uninterrupted local and long distance services on and after January 1, 2000. In its quarterly report to the Federal Communications Commission (FCC), the Network Reliability and Interoperability Council (NRIC) announced that, based on surveys with telecommunications companies, the industry is expected to achieve Year 2000 readiness late in the 3rd quarter, 1999.

## ASSESSMENT OF U.S. TELECOMMUNICATIONS NETWORKS

As of June 1999, approximately 99 percent of the switches in the U.S. Public Switched Telephone Network (PSTN), owned by large, Local Exchange Carriers (LECs), were Y2K ready. At its April 1999 meeting, the NRIC reported that major Inter-Exchange Carrier (IXC) switches were virtually 100 percent Y2K ready. The NRIC reported on July 14 that 98 percent of the components of IXCs' non-switched networks have been made Y2K ready and that 97 percent of the IXCs' network and IS applications have also been made Y2K ready. The NRIC reported that September is the current target for large LECs and IXCs to be 100 percent Y2K ready.

While mid- and small-sized LECs trail their larger, LEC counterparts in achieving Y2K readiness, the NRIC reported its continuing expectation that most mid- and small-sized LECs will be Y2K ready in the third and fourth quarter, 1999. To supplement the NRIC's efforts and to get more insight into the readiness of these LECs, the FCC last month issued a formal request, asking for confirmation on their individual Y2K readiness.

In addition, this month the National Association of Regulatory Utility Commissioners (NARUC) began a state-by-state Y2K readiness assessment of mid- and small-sized LECs and expects to have its results sometime in September. The U.S. Telecommunications Association (USTA) has taken the initiative to poll key members for their Y2K readiness status, as well. A summary of these reports will be presented at the next scheduled NRIC meeting in October 1999.

The NRIC also reported that telephony processing was not expected to be affected by the century date change based on industry testing by the Telco Year 2000 Forum and the Alliance for Telecommunications Industry Solutions (ATIS). Their joint report revealed virtually no Y2K problems in remediated components.

The report also stated that the industry's voice and data transmissions as well as Operations Support Systems (OSSs) are expected to function normally and that there is no indication of pockets of non-compliant network or support systems in the U.S. The NRIC reported that the risk of failure of the domestic PSTN is minimal and expressed confidence in the network. As a result of its findings, NRIC indicated no further testing of these network elements is warranted.

The NRIC's interoperability testing sub-committee reported its conclusion that a Y2K-ready network provider's equipment will not fail to operate when connected with a non-Y2K-ready network provider's equipment due to a change in date.

In addition, the report also stated that potential Y2K impacts in non-Y2K-ready networks would not affect the networks with which they connect.

The NRIC went on to report that, on or after January 1, 2000, a non-Y2K-ready network may experience problems such as: limited service or call blocking caused by the degraded performance of its network; problems in billing; problems with maintenance tools such as date comparison errors in search results or activities not started; and problems with operator interfaces that may experience incorrect displays of date or day of the week information.

## ASSESSMENT OF NETWORK RELIABILITY

The NRIC was advised by the ATIS Network Reliability Steering Committee (NRSC) that while looking across the entire telecommunications network, both the number of outages and the aggregated outage index (a measure of impact on customers) remain within control limits. Outages attributable to "procedural (human) errors" continue to be a major concern.

The NRSC has just published their report on this subject, "Procedural Outage Reduction: Addressing the Human Part," which is available on the ATIS web site at <a href="http://www.atis.org/atis/nrsc/nrscinfo.htm">http://www.atis.org/atis/nrsc/nrscinfo.htm</a>.

Increasingly, the NRSC reported, telecommunications in the U.S. are characterized by interconnection between LECs/IXCs and providers of services such as cellular, wireless, cable, ISPs and paging companies. In order to maintain and improve telecommunications reliability, the NRSC is developing recommendations that could be used to conduct a trial of outage reporting beyond the LECs/IXCs and Competitive Access Providers (CAPs) covered by the original outage-reporting requirement. This trial would allow service providers to assess service outage or service degradation situations for non-wireline services. Further, the NRSC is updating its network reliability "best practices" from NRIC II so that they can be used by telecommunications providers not covered by the original practices.

## ASSESSMENT OF INTERNATIONAL TELECOMMUNICATIONS NETWORKS

Based on input from various public and private assessments over the past quarter, the NRIC reported the risk profile of international traffic to and from the United States in the year 2000 has improved. With 90 percent of U.S. international traffic (29B Minutes of International Telecom Traffic or MITT) to and from 53 countries, only 20 percent of that traffic currently remains at high risk of non-completion on or after January 1, 2000. Since the NRIC's April report, 30 percent of this total traffic has moved from the high risk to the low risk category resulting in a current total of 51 percent of this international calling being reported as low risk. The remaining 10 percent of the U.S. international traffic (3B MITT) is to and from 166

countries, and 67 of those countries remain at high risk of not achieving Y2K readiness. Overall, the NRIC reported its testing indicated the risk of international call failure between the North American region and other World regions is minimal. Network congestion, however, may be an issue at the century date change.

The NRIC's report went on to state that the "perception of risk analysis" in the international community may be more a measure of communication about Y2K rather than a true status of Y2K readiness. More specifically, the NRIC stated that a lack of information from a country does not, in and of itself, indicate no or poor compliance. It may just mean there is a lack of information. The NRIC believes that several countries may privately be doing more to become Y2K ready than they wish to share publicly. To get a better assessment of these high risk areas, the North American test group of the International Telecommunications Union (ITU) task force, in cooperation with the NRIC, has begun focusing their testing on those countries that are viewed as high risk.

## ASSESSMENT OF NETWORK ACCESS

The NRIC report also provided insight on the readiness of customer premises equipment (CPE) and systems that interface with the PSTN. Since its last report, the Council reported it had found no major problems or industry-wide issues that cannot be handled with planning including 911 call processing. The report stated that while most private data networks may require fairly extensive upgrades, software upgrades, which are most common, can often be distributed through a company's internal network while firmware upgrades sometimes require CPE to be returned to factories for appropriate upgrades. As a result, the NRIC report pointed out that individual user assessment and testing is extremely important.

In the three months since its last report, NRIC has found that 34 percent (up from 10 percent reported in the previous quarter) of Public Safety Answering Positions (PSAPs), utilized by local governments in responding to 911 calls, have achieved Y2K readiness. In addition, 47 percent of the remaining PSAPs are in the process of achieving Y2K readiness.

While this is an improvement, the NRIC has recommended that non-compliant PSAP owners take immediate action to achieve Y2K readiness, that telephone companies begin sharing appropriate data to help these PSAP owners achieve Y2K readiness and that the FCC begin promoting the availability of funding for municipalities with limited financial resources. It was also reported that the Federal Emergency Management Association (FEMA) has done a survey of PSAP's Y2K readiness and their data indicated 91 percent of PSAPs across the nation will be Y2K ready by January 1, 2000. At the NRIC meeting, it was reported that FCC Commissioner Michael Powell had sent letters to directors of emergency services in each state to raise their awareness of the Year 2000 issue and the potential impact the century date change might have on PSAPs.

## ASSESSMENT OF INDUSTRY-WIDE CONTINGENCY PLANNING

In its report, NRIC also reviewed industry-wide Y2K contingency planning efforts. In a Contingency Planning Workshop, conducted on April 27, 1999, for the telecommunications

industry, the NRIC collaborated with the USTA to provide specifics on awareness and understanding of Y2K contingency planning. The NRIC also reported that this committee had developed a set of Contingency Planning Guidelines that were available on the NRIC web site (http://www.nric.org).

## **CONCLUSION**

In conclusion, the NRIC reported the U.S. telecommunications industry continues to effectively approach Y2K readiness and will achieve that readiness in advance of the turn of the century. In addition, the NRIC fully expects the PSTN will continue to reliably function, interoperate and interconnect on and after January 1, 2000.

To provide a public forum on the telecommunications industry's Y2K readiness, the NRIC will co-sponsor a Communications Forum with the IEC on August 5, 1999 at the Omni Shoreham Hotel in Washington, D.C.

Specifics regarding this conference can be found at <a href="http://www.iec.org">http://www.iec.org</a>. Information regarding each of the NRIC sub-committee presentations will be posted on the NRIC web site (<a href="http://www.nric.org">http://www.nric.org</a>). Information on other NRIC activities associated with general network reliability can be found at <a href="http://www.atis.org/atis/nrsc/nrscinfo.htm">http://www.atis.org/atis/nrsc/nrscinfo.htm</a>.